

COTTON REGION REPORTS.

The following table gives the average rainfall, mean of the maximum and mean of the minimum temperatures, in each of the cotton districts, as shown on the chart issued with the April REVIEW.

Meteorological Record of the Cotton Districts for the month of October, 1882.

DISTRICTS.	Average rainfall in inches.	Mean of the maximum.	Mean of the minimum.
New Orleans	2.64	81.9	62.0
Savannah	4.95	80.0	61.0
Charleston	4.41	78.2	55.3
Atlanta	2.04	76.2	56.1
Wilmington	3.08	75.3	53.5
Memphis	2.02	73.3	54.6
Galveston	5.73	82.6	60.4
Vicksburg	4.21	79.8	56.8
Montgomery	2.28	79.8	58.0
Augusta	2.64	77.5	57.4
Little Rock	4.34	78.3	54.5
Mobile	2.34	81.7	58.3

WINDS.

The prevailing direction of the winds during the month of October, 1882, at Signal Service stations, are shown on chart ii., by arrows flying with the wind. Along the Atlantic coast, the prevailing winds are from the northeast. Throughout the remainder of the country, east of the Rocky mountains, they are, with but few exceptions, southerly. In the north Pacific coast region, they are from the south and southwest, and in the Middle and South Pacific coast regions from the south, west, and southwest.

TOTAL MOVEMENTS OF THE AIR.

[In miles.]

The following are the largest total movements at the Signal Service stations: On the summit of Mount Washington, New Hampshire, 23,954; on the summit of Pike's Peak, Colorado, 20,813; Portsmouth, North Carolina, 13,477; Hatteras, North Carolina, 12,895; Kittyhawk, North Carolina, 12,632; Delaware Breakwater, 11,711; Block Island, Rhode Island, 11,353; Cape Henry, Virginia, 10,684; Barnegat, New Jersey, 10,518; Sandy Hook, New Jersey, 10,279; Fort Macon, North Carolina, 9,849; Eagle Rock, Idaho, 9,864; Cape May, New Jersey, 9,475; Fort Shaw, Montana, 9,452; Dodge City, Kansas, 9,407; Fort Eads, Louisiana, 9,382; Galveston, Texas, 8,931; Fort Assiniboine, Montana, 8,617; Indianola, Texas, 8,530; Sandusky, Ohio, 8,470; Duluth, Minnesota, 8,320; Mackinac City, Michigan, 8,002. The smallest total movements are: Lynchburg, Virginia, 1,546; Morgantown, West Virginia, 1,708; Silver City, New Mexico, 1,775; Lewiston, Idaho, 1,997; Williamsport, Pennsylvania, 2,035; Visalia, California, 2,218; Washington, District of Columbia, 2,494; Uvalde, Texas, 2,597; Fort Missoula, Montana, 2,655; Dubuque, Iowa, 2,676; Tucson, Arizona, 2,761; Augusta, Georgia, 2,832; Cincinnati, Ohio, 2,969; San Antonio, Texas, 2,978.

HIGH WINDS.

Maximum velocities of fifty miles per hour or more have been reported, as follows:

On the summit of Mount Washington, New Hampshire, 56, nw., 1st; 80, nw., 2d; 60, nw., 3d; 80, nw., 4th; 65, nw., 7th; 60, nw., 8th; 73, w., 9th; 90, w., 10th; 62, nw., 11th; 60, nw., 14th; 64, s., 16th; 62, sw., 17th; 53, s., 22d; 78, nw., 25th; 86, nw., 26th; 66, nw., 27th; 100, s., 29th (maximum for month); 66, nw., 30th; 84, w., 31st.

On the summit of Pike's Peak, Colorado, 56, w., 2d; 54, sw., 3d; 52, sw., 5th; 72, w., 10th; 84, w., 11th; 64, sw., 14th; 56, w., 15th; 52, w., 16th; 54, sw., 21st; 54, n., 22d; 62, w., 24th; 64, sw., 25th; 68, w., 26th; 53, nw., 27th; 56, w., 28th; 96, sw., 29th (maximum for month); 60, sw., 30th.

Portsmouth, North Carolina, 56, ne., 12th.

Cedar Keys, Florida, 56, s., 10th.

Cape Henry, Virginia, 56, n., 24th.

Eagle Rock, Idaho, 54, w., 12th.

Kittyhawk, North Carolina, 52, ne., 12th.

Galveston, Texas, 52, n., 19th.

Milwaukee, Wisconsin, 52, s., 30th.

Fort Keogh, Montana, 52, w., 27th.

Umatilla, Oregon, 51, w., 11th.

Fort Maginnis, Montana, 50, w., 27th.

LOCAL STORMS.

California: A destructive wind and rain storm occurred in the state, on the 2d. The following notes are given in connection with it: Marysville: The wind caused much damage to trees; large quantities of fruit were blown from the trees. Chico: Trees and shrubbery were blown down. The wind attained a hurricane-like force. North San Juan: The storm was very fierce in this vicinity, but there was no serious damage to property. Stockton: The storm continued with extreme violence for fifteen hours; several buildings were damaged, and many trees were blown down. San Francisco: The storm did some damage to vessels in the bay; one barge was capsized. The sea was very rough. Sacramento: This was the heaviest October storm ever recorded here. It approached very suddenly, and the barometer did not fall until the storm had reached this locality. The damage to the wheat, hay, and grape crops is estimated at \$400,000. The greatest damage was done in the Sacramento, San Joaquin, and Napa valleys, and was caused by the heavy rains. Some bulkheads and many shade trees were blown down.

Iowa: A tornado occurred about five miles east of Davenport, on the afternoon of the 30th. At 3.30 p. m., two funnel-shaped clouds were observed to unite at a point about five miles northeast of Davenport; the tornado-cloud then moved by a zig-zag course through Scott county in a northeasterly direction toward Princeton, where it appears to have expended its energy. The path of the tornado was about one quarter of a mile wide and about eighteen miles long; the cloud appeared to rise and fall, striking the earth at intervals, when it caused much damage. Three houses were totally demolished, and thirty dwellings and barns were unroofed or seriously damaged; hay-stacks were carried away and farming implements were much damaged. The total loss is estimated at \$60,000. Two persons were fatally injured by falling ruins, and six others sustained more or less serious injury. At Davenport, the storm was unattended by wind, but hailstones of unusual size fell (see hail storms), and the atmosphere was warm and sultry. Persons in East Davenport stated that a sullen, roaring noise was heard at that place, immediately before the formation of the tornado-cloud.

Kansas: A storm, accompanied by high wind, occurred at Fort Scott, on the 30th. Many signs were blown down, and other slight damage was done.

Minnesota: On the 12th, the wind reached a velocity of forty-eight miles an hour, at Saint Paul. The State Armory building was blown down, and much damage was done to trees and fences.

Missouri: A heavy wind storm occurred at Boonville, on the afternoon of the 12th. The damage to property was slight.

New York: During a heavy gale that occurred over Lake Erie, on the 29th, several schooners sustained more or less damage. Much damage was done on the Canadian shore by this storm.

Texas: A heavy wind storm, accompanied by thunder and lightning and torrents of rain, occurred at Dallas, on the night of the 15th. The wind caused much damage to trees, fences, and houses, and especially to the cotton crop.

VERIFICATIONS.

INDICATIONS.

The detailed comparison of the tri-daily indications for October, 1882, with the telegraphic reports for the succeeding twenty-four hours, shows the general average percentage of verifications to be 86.03 per cent. The percentages for the four elements are: Weather, 87.28; direction of the wind, 83.06; temperature, 89.35; barometer, 84.39 per cent. By geographical districts, they are: For New England, 83.4; middle Atlantic states, 81.8; south Atlantic states, 87.3; east Gulf states, 86.5; west Gulf states, 88.0; lower lake region, 86.3; upper lake region, 91.2; Tennessee and the Ohio valley,